Functional Gastrointestinal Disturbances

Recognition and Treatment

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• *The recognition of functional gastrointestinal diseases depends essentially on certain positive features characteristic of them. When there are evidences of associated functional disturbances in other organ systems or in the patient as a whole, or characteristic clinical syndromes are present, and there is lack of symptomatic or objective evidence of organic disease on careful examination, the diagnosis of functional gastrointestinal disorder is likely.*

Treatment of functional gastrointestinal disturbances rests fundamentally on the art of medicine in the treatment of the patient and not on the science of medicine in the treatment of a disease. The essential steps in successful treatment include convincing the patient of the diagnosis, improving and relieving symptoms and avoiding or adequately controlling recurrences.

Psychotherapy is a keystone in the treatment of functional gastrointestinal disorders. Not often, however, are the services of a psychiatrist necessary. Given, as needed, mild sedatives, certain forms of specific treatment in specific conditions, general measures and good hygiene and sympathetic understanding, the patient may be expected to recover or improve.

Too OFTEN the diagnosis of functional gastrointestinal disturbances is made on the basis of exclusion when evidence of organic disease is lacking. However, the diagnosis should be made on the basis of positive evidence, of symptoms characteristic of these disorders—manifestations just as characteristic of functional disturbances as are those of organic disease when the cause is organic change (Table 1). The diagnosis of a functional gastrointestinal disturbance should be suspected from the history given by the patient and confirmed by suitable physical examination and laboratory and roentgenologic studies. The diagnosis of these conditions is particularly difficult for physicians who cling to the old ideas concerning the origin of the symptoms previously discussed.

It has been said that if the physician will sit and listen, almost every patient will give enough information to permit the correct diagnosis to be made or at least suspected. Good listening is particularly important to the physician who deals with functional problems. Symptoms are sought which suggest familiar complexes and syndromes. As the story progresses questions are asked to complete a recognized pattern of either functional or organic disease.

Certain positive features strongly suggest a functional disturbance. These include symptoms that are characteristic and typical—for example, globus, aerophagia or functional vomiting. These features may be readily recognized in some cases, in others difficult to elicit. Other positive features include long continuance of symptoms without significant impairment of general health; failure to conform to the pattern of any recognizable organic disease; a bizarre timing of symptoms, such as the regular occurrence at six-weekly intervals, the close relationship of them to external stress and emotional disturbances; constancy of symptoms (particularly over a period of years); disappearance of symptoms during the night; the presence of pain with radiation in bizarre fashion to areas without established nervous system relationships; and the presence of burning pain, particularly when it is constant.

Associated Evidence of a Functional Disorder. The occurrence of gastrointestinal symptoms in a patient with other symptoms of an emotional disturbance should make one suspect the possibility of a functional gastrointestinal disorder. Among such associated symptoms are chronic fatigue and nervousness, anxiety and tension, being "tired all the time," having headache, insomnia, "light-headedness," numbness in the fingers and toes, difficulty in getting a deep breath, tremor and cardiovascular symptoms, including blushing, tachycardia, palpitation and cold, sweaty hands and feet.

It is always valuable to note whether the patient has had a normal emotional reaction to the symp-

TABLE 1. — *Points in recognition of functional gastrointestinal disorders.*

1. Positive features
2. Other evidences of functional disorders.
3. Various typical syndromes.
4. Lack of evidence of organic disease on examination.

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toms. Either undue concern or an unusually apathetic attitude toward the complaint should suggest to the physician that he may be dealing with a functional problem.

Various Typical Syndromes. A third significant diagnostic feature is the presence of a clinical syndrome typical of a functional disturbance, such as globus, aerophagia, cardiospasm, functional vomiting and hysterical bloating. However a functional disturbance may be present without causing such a typical syndrome.

Lack of Evidence of Organic Disease on Examination. The final point in diagnosis is the lack of evidence, on examination, of organic disease or of a disease that could produce the patient's symptoms. Physical examination must be thorough and complete. It frequently will reveal other evidences of functional disturbances. In addition to routine urinalysis and blood count, radiologic and laboratory studies should be carried out to the extent demanded by the judgment of the physician. It generally is wise to include studies of the organ which seems affected symptomatically or about which the patient expresses concern or doubt. For success in diagnosis as well as treatment, the patient and the physician must be satisfied that the studies have been complete and thorough.

It seems appropriate at this point to indicate the great importance of rectal and sigmoidoscopic examination, for these examinations all too frequently are overlooked or forgotten. It should be emphasized that occasionally examination of the stool for parasites and ova may give very useful information.

Accuracy of Diagnosis. The diagnosis of functional gastrointestinal disorders when made following adequate clinical evaluation is surprisingly accurate. Wilbur and Mills,[4] for example, some time ago carefully reexamined 354 patients who had a record of a previous diagnosis of functional gastrointestinal disturbance. The reexaminations were done at least seven years after the diagnosis was made and the original diagnosis was reaffirmed in 85 per cent of cases. The organic conditions most commonly found at the second examination which may have been missed and have led to symptoms at the time of the original examination were duodenal ulcer and gallbladder disease.

TREATMENT

The management of a patient with a functional gastrointestinal complaint is largely an art. In other words, it calls principally on the art of medicine in the treatment of a patient and not on the science of medicine in the treatment of a disease. For this reason quacks, charlatans, persons who treat with prayer or practice of religion and cultists without adequate training in the basic medical sciences are frequently highly successful in the management of patients with functional gastrointestinal disturbances. Too often the physician or surgeon skillfully trained in the science of disease approaches the patient from the standpoint of a disease or disturbed organ function and fails to visualize the disturbance in function of the patient as a whole. He does not recognize the "functional disturbance" presented by the patient and therefore is not successful in handling him or he lacks interest in doing so and passes him off as a "neurotic."

TABLE 2.—*Functional gastrointestinal disorders—Treatment.*

Art of Medicine vs. *Science of Medicine.*

Three steps to successful treatment:

1. Convince the patient of the diagnosis.
   (a) Accurate diagnosis.
   (b) Adequate explanation to the patient.
2. Improving or relieving symptoms.
   (a) Psychotherapy.
   (b) Diet.
   (c) Drugs.
   (d) General measures.
   (e) Psychiatric treatment.
   (f) Specific measures.
3. Preventing relapse.

Wide experience makes it quite clear that to be successful in management of a patient with a functional gastrointestinal complaint the physician must like the task just as a good surgeon must like to operate and a good obstetrician like to care for and deliver a pregnant woman.

As was previously mentioned, there are more hopeful avenues of approach to the management of "functional disorders" than is the case with most organic diseases. Briefly, the task of the physician who treats such patients is to establish the diagnosis, to reach the root of the difficulty and to work out an effective plan of treatment in the time he can afford to devote to a single patient. Sometimes this may be very simple, as in the case of a patient with anxiety over rectal bleeding which the patient suspects may be due to cancer of the rectum. But commonly the problem is not so simple and at times it may be very difficult.

The physician who is treating a patient for functional disorder must develop a plan tailored to fit the individual problem (Table 2). Three steps are essential. The first is a well thought out way to convince the patient of the diagnosis; second, a carefully considered program of specific therapy directed toward the patient, his conflict and his symptoms; and, finally, an attempt to show the patient how to remain largely symptom-free and to prevent relapses once improvement has occurred. The physician is guided in what he says and how he says it by his estimation of the patient's intelligence,

education, character, past experience and degree of sexual, psychological and philosophical maturity as well as by the characteristics of the conflict situation.

Convincing the patient of the diagnosis requires two steps. The first is an accurate diagnosis and the second an adequate and satisfactory explanation of the situation to the patient. Rare, nowadays, is the patient who is satisfied with the statement, "There is nothing the matter with you; it is 'just nervous indigestion.'" Especially in functional disorders the patient must be convinced of the diagnosis if treatment is to be successful. The physician certainly must let it be known that he does not look upon the symptoms as imaginary. At the same time the patient must be convinced that the symptoms are the body's "normal" response to prolonged anxiety or tension and not indicative of a severe or incurable disease.

It should be relatively easy to show a patient how stress and tension may result in gastrointestinal symptoms. Almost everyone has had some form of gastrointestinal symptoms under stress or with an emotional upset. The patient must be told that a certain amount of tension or stress is a normal part of every day life and that each person has a limit of tolerance for tension or stress and that when that limit is exceeded, symptoms occur. Every effort should be made to preserve the self respect of the patient and the feeling that he is respected in the eyes of members of his family and close friends. When the patient asks questions about the condition, the physician must have an answer to every question and the answers must be consistent.

Above all the patient must be given hope, for hope is the one thing all of us want when we are in trouble.

IMPROVING OR RELIEVING SYMPTOMS

Psychotherapy is the keystone in treatment directed toward relieving symptoms. As "specific therapy" it may be simple or it may require the services of a psychiatrist. Fortunately in most instances the general physician can successfully deal with such a patient. Whitehorn well expressed the situation: "Psychotherapy will consist largely in the thoughtful and respectful consideration with the patient of how the situation might be met more effectively, not by an ideal person, but by the person who is the patient, using to the best advantage the assets and attitudes which he has shown in periods of good adjustment. The whole art of psychotherapy depends largely on learning how to exert this special personal influence strategically to the patient's best advantage in finding a better way to meet a life situation." The establishment of rapport so good that the patient will tell the physician anything and look upon him as a knowing, sympathetic person, is extremely helpful.

Owing to an innate desire to know about themselves, most patients are helped by a free discussion of just what is wrong with them.

Diet. So variable are the needs that it is difficult to generalize about the dietetic management of patients with functional gastrointestinal disturbances. In general, however, a smooth diet, adequate in proteins, vitamins and calories and with as little restriction in variety as possible, best meets the average situation. An increase or decrease in calories depending on the need for a gain or loss in weight may bring about success in some patients. For patients with little appetite, or for hospitalized patients, feedings as far apart as possible (at least five hours) usually are helpful. The need for reduction in roughage or an increase in it when diarrhea or constipation occurs is obvious. Patients should be encouraged to eat slowly and not to eat when tense or under too much stress. At times omission of coffee, alcohol or tobacco may be very helpful. Finally, for patients who require much dietary consideration the services of a skillful and sensible dietitian are invaluable in working out the details of a program.

Drugs. Sedatives are the most useful drugs in the treatment of functional gastrointestinal disturbances. They are not curative but, like a crutch, are exceedingly useful in getting the patient over a crisis, in helping him to regain his feeling of well-being and in giving him an insight into what it feels like to be eased or free of symptoms. Small doses of barbiturates and the occasional intermittent use of chloral hydrate or bromide, prescribed at times in a form new to the patient, and used during the day and to obtain sleep at night, may change the whole outlook of a nervous patient with gastrointestinal symptoms. It is wise to limit the amount of drugs and the period over which they are to be used. In the author's experience not many patients, except the severely psychoneurotic, become psychologically dependent on barbiturates. As physicians feel no grave concern over the way the average "normal" person drugs himself daily with caffeine, nicotine, alcohol and often acetylsalycilic acid, the occasional addition of barbiturates to this daily ration should cause no serious misgivings.

Next to sedatives, antispasmodics in the form of belladonna and its alkaloids and of the many recently developed synthetic anticholinergic agents are the most useful drugs in therapy of functional disturbance. Curiously, a particular anticholinergic drug may work exceedingly well in one patient when others do not, whereas in another patient the converse may be true. Because belladonna and atropine are so commonly satisfactory and so much less expensive, they should be used first.

Chlorpromazine, which acts as a mild depressant to the central nervous system, may be very helpful in controlling functional nausea and vomiting and in augmenting the effects of other drugs in the management of abdominal discomfort and pain.

Antacids, vitamins and dilute hydrochloric acid properly used may be helpful. In some cases smooth bulk substances are helpful in the control of constipation and occasionally in diarrhea; and a variety of symptomatic measures for the control of diarrhea, such as administration of kaolin, bismuth, pectin and even small doses of opiates, may be extremely useful in handling an acute situation or bringing a chronic one more satisfactorily under control. The proper control of chronic constipation alone is one of the most helpful means of relieving functional gastrointestinal disturbances.

Vitamins, particularly of the vitamin B complex, frequently are very helpful in patients who have been on limited diets; in others they have a useful tonic or psychologic effect.

Any discussion of drugs in treatment of patients with functional gastrointestinal disturbances should include a consideration of the placebo response so well emphasized by Wolf. Improvement that follows administration of a particular drug or group of drugs may be wholly psychic although the good effect may be attributed by both physician and patient to the pharmacologic effect.

Recent observations of Beecher and his associates have further advanced understanding of the phenomenon of the placebo response. In study of 162 postoperative patients observed for ability to obtain significant relief of pain from subcutaneous injections of morphine and placebos, these observers found a considerable number of patients who responded with relief of pain following injections of placebos. Fewer than half the patients who received multiple doses of placebos responded consistently to them. There were no sex differences and no differences in intelligence between placebo reactors and nonreactors. In general placebo reactors in stressful postoperative situations behaved in immature, dependent and more outwardly responsive fashion and "thus receive considerable relief of pain through comfort received from attentive nursing care and from confidence in the effectiveness of drugs," while the nonreactor, "withdrawn and rigidly clinging to critical intellectual processes, is less comforted by the care received and evidently more critical of drug effects." Placebo reactors were more productive of response, more anxious, more self centered and preoccupied with internal bodily processes and more emotionally labile.

Much more study and observation must be carried out in this important field before clinicians can properly evaluate the nature of response of patients with functional gastrointestinal disorders.

General Measures. Rest and exercise, extroverting activities, the development of suitable outlets and hobbies and the taking of vacations may be most helpful in the long-time planning of treatment of chronic functional gastrointestinal disturbances.

Specific Measures of Treatment. There are certain specific measures of treatment useful in specific types of functional gastrointestinal disease. These include dilatation of the esophagus for spasm, a dry diet in functional vomiting and aerophagia, voluntary control of belching in aerophagia, manual dilatation of the tight anus in cases of constipation and irritable colon, and the use of smooth bulk substances and abdominal exercises in constipation. An elimination diet may be extremely helpful in patients who suspect they are allergic or who insist that certain foods cause distress, but trial of a limited diet should be restricted to short periods.

Psychiatric Treatment. General physicians can properly treat most patients with functional gastrointestinal disorders. Occasionally in the case of a patient who has severe chronic psychoneurosis or who has psychotic symptoms such as those of depression, or who reflects a notable absence of emotional concern about his condition, or is hysterical or has conflicts which involve deep guilt or serious disturbance of one of the basic emotional drives, a competent psychiatrist should take over the case. Sometimes, however, a physician may carry such a patient along at a superficial level until he is willing to see a psychiatrist.

PREVENTION OF RECURRENCE

Successful management of patients with functional gastrointestinal disorders does not end with control of the presenting situation. Many patients have recurrent bouts of tension, anxiety and gastrointestinal symptoms. Such a patient should be told to expect symptoms whenever tolerance for tension is exceeded. He may avoid a situation that will result in anxiety and tension. Through treatment he may develop insight into his symptoms and build up stress tolerance to the maximum. He may be taught to avoid long and needless worry about new and persisting symptoms and he may also learn simple dietary and therapeutic measures for handling recurrence of symptoms. Since his problem is a medical one, he should not hesitate to seek the advice of his physician at regular intervals or when he gets into difficulties that he cannot himself resolve.

PROGNOSIS

The prognosis of patients with functional gastrointestinal disturbances varies greatly and may be

very difficult to estimate. In general the prognosis for patients with simple anxiety and tension and fatigue states is good, particularly when anxiety can be relieved and fatiguing work restricted and rest prolonged. Young persons with emotional and environmental problems that can be solved often improve remarkably and recover completely. For patients with pronounced chronic emotional disturbances or prolonged economic or environmental conflicts that cannot be altered or to which they cannot become accustomed, and for patients with psychotic disturbances, the outlook is often not too good; yet the patient often can be improved, and even a little improvement may be enough to make life worth living again.

ADDENDUM

After careful consideration of this whole problem one cannot but agree in part at least with Josh Billings, who said, "I have finally kum tu the konklusion that a good reliable sett ov bowels iz wurth more tu a man than enny quantity ov brains."

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